



CITY OF KIRKLAND
Department of Public Works
123 Fifth Avenue, Kirkland, WA 98033 425.587.3800
www.ci.kirkland.wa.us

MEMORANDUM

To: Dave Ramsay, City Manager

From: Jenny Gaus, Surface Water Engineering Supervisor
Daryl Grigsby, Public Works Director

Date: October 4, 2007

Subject: Response Letter to Keith Maehlum

RECOMMENDATION:

It is recommended that Council authorize the Mayor to sign the enclosed response letter to Keith Maehlum which details changes that have been made to the 2008-2013 Surface Water CIP.

BACKGROUND DISCUSSION:

Mr. Maehlum met with City staff in July of 2007 to discuss flooding that has been occurring at the Plaza at Yarrow Bay Business Park. Mr. Maehlum is a part-owner of this office park. He was concerned because a project that included measures to reduce flooding of the office park as well as replacement of the culvert beneath Lake Washington Boulevard, SD-0048 Cochran Springs/Lake Washington Boulevard Crossing Enhancement, had been moved to the unfunded list in the Preliminary 2008-2013 CIP. The flooding of the office park appears to result from sediment buildup in Cochran Springs Creek, which runs through the office park in a city-owned parcel. Following discussions with Mr. Maehlum, and in further investigation of the situation, staff recommended that the flood relief measures for the office park be constructed separately from the rest of the SD-0048 project.

The SD-0048 project had been moved to the unfunded portion of the CIP because it does not appear that replacement of the culvert beneath Lake Washington Boulevard will be necessary, based on the fact that the existing culvert has not caused flooding of Lake Washington Boulevard through the several extreme (100-year plus intensity) rain events that have occurred in the past few years. The Lake Washington Boulevard culvert replacement comprised the majority of the project budget, making the cost/benefit of the overall project unfavorable.

The following changes have been made in the 2008-2013 CIP in response to staff review and to Mr. Maehlum's letter and testimony:

- New project SD-0065 Cochran Springs Creek/Plaza at Yarrow Bay Flood Control has been added. Project will provide flood reduction at the office park and riparian restoration. It is funded at \$156,000 and is scheduled to begin in 2008.

- The budget for project SD-0048 Cochran Springs/Lake Washington Boulevard Crossing Enhancement has been reduced by \$156,000. This project will remain on the unfunded list. Staff will continue to monitor the Lake Washington Boulevard culvert to determine whether or not a replacement crossing for the stream is warranted.

The letter to Mr. Maehlum details these changes. Should you have any questions or concerns about these changes to the CIP, please contact Jenny Gaus, Surface Water Engineering Supervisor.

Attachment 1:

Letter from Keith Maehlum to the Honorable Mayor Lauinger and Kirkland City Council dated September 4, 2007

September 4, 2007

Honorable Mayor Lauinger and Kirkland City Council
City of Kirkland
123 Fifth Avenue
Kirkland, WA 98033

Re: Preliminary 2008-2013 CIP
Cochran Springs Creek, Project Number SD 0048

Honorable Mayor Lauinger and Kirkland City Council,

We would appreciate your consideration of dividing the Cochran Springs Creek project into two parts; the first part to be funded as soon as possible would address flood control measures for Cochran Springs Creek and the second part to remain unfunded would address the Lake Washington Boulevard crossing.

We are the owners of the Plaza at Yarrow Bay, a 300,000 sf, Class A office campus on Lake Washington Boulevard just north of SR-520 and home to many high quality office tenants such as University of Washington, Manpower International, Windermere Real Estate and Electronic Evidence Discovery, just to name a few.

A public stream corridor containing Cochran Springs Creek bisects the northern portion of the office campus as shown on the enclosed photo. Several times over the last several years, the creek has overflowed its south bank and flooded a significant portion of the parking lot as shown on the enclosed diagram. At least once in recent years, the creek overflowed to such a degree that the flooding extended beyond the parking lot to the lower structured parking area and the campus's exercise facility. Every time that the parking lot and exercise facility is flooded, there is a fair amount of property damage and extensive clean up required. We have not sought reimbursement from the City for this damage in the past. In addition, the flooding causes considerable inconvenience to the campus's employees who cannot get access to their cars due to the depth of the water in the parking lot.

After reviewing this matter with City Staff from Parks and Public Works, we understand that the cause of the creek flooding is sediment buildup in the stream channel west of

The Plaza at Yarrow Bay, Inc.

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Telephone: (206) 448-5080 ♦ Facsimile: (206) 448-5075

Lake Washington Boulevard. The 2006-2011 CIP included the entire project as funded with construction starting in 2009 and included a description that “sand in the stream appears to originate from springs and upwelling, as opposed to large-scale bank erosion,” and that “sediment deposition downstream of Lake Washington Boulevard may increase the risk of overbank flooding water in the Yarrow Bay business park.” Since then the project has been re-designated as unfunded.

Our experience over the past few years is that the frequency and the severity of the flooding are increasing as the buildup of the sediment increases. We feel that the existing temporary flood control measures as shown on the enclosed photo are unsightly, could soon fail and do not convey a sense of quality or security to our tenants. Therefore, we request your consideration of authorizing a more permanent flood control improvement be constructed to eliminate future creek flooding as soon as possible.

Please call me at 206-839-9867 or email me at kmaehlum@halrealestate.com if you have any questions.

Respectfully,

A handwritten signature in blue ink that reads "Keith Maehlum". The signature is fluid and cursive, with the first name being more prominent.

Keith Maehlum

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City of Kirkland Preliminary 2008-2013 Capital Improvement Program

SURFACE WATER MANAGEMENT UTILITY PROJECTS

Funded Projects:

Project Number	Project Title	Prior Year(s)	2008	2009	2010	2011	2012	2013	2008-2013 Total	Funding Source				
										Current Revenue	Reserve	Debt	External Source	
SD 0045*	Carlton Woods Erosion Control Measures			22,400	84,100	451,000			557,500	557,500				
SD 0047	Annual Replacement of Aging/Failing Infrastructure		200,000	200,000	200,000	200,000	200,000	200,000	1,200,000	1,200,000				
SD 0049*	Forbes Creek/108th Ave NE Fish Passage Impr			103,500	255,600				359,100	359,100				
SD 0050*	NE 95th St/129th Ave NE Flood Control Measures					16,700	89,200		105,900	105,900				
SD 0051*	Forbes Creek/KC Metro Access Road Culvert Enh.	279,200	202,300						481,500	481,500			47,000	
SD 0052*	Forbes Creek/Slater Ave Streambank Stabilization				75,200	90,200			165,400	165,400				
SD 0053*	Forbes Creek/Coors Pond Channel Grade Controls	260,200	200,300						460,500	460,500				
SD 0054*	Forbes Creek/BNSFRR Fish Passage Improvements	51,500						519,800	571,300	519,800				
SD 0055*	Forbes Creek/Ponds Fish Passage/Riparian Plantings				110,700	193,400			304,100	304,100				
SD 0059*	Surface Water Sediment Pond Reclamation Phase II		90,000	169,000	149,000	83,200			491,200	491,200				
SD 0059*	Tatum Lake Blvd Flood Control Measures	82,400	408,500	479,200	410,800				1,380,900	1,380,900				
SD 0060*	Juventa Creek/NE 122nd St Bank Stabilization	103,300	253,500						356,800	356,800				
SD 0061*	Everest Park Stream Channel/Spartan Enhancements					274,200	542,700	528,600	1,345,500	1,345,500				
SD 0062*	Stream Flood Control Measures at Post Office					26,500	265,000	244,900	536,400	536,400				
SD 0063	Everest Creek-Slater Ave at Alexander St.		169,200	574,400	125,400				869,000	869,000				
SD 0064	NE 88th St Storm Drainage Improvements		80,000	98,000					178,000	178,000				
SD 0057*	Streambank Stabilization Program - NE 88th Street	50,000			171,200	253,200	509,100		983,500	983,500				
Total Funded Surface Water Management Utility Projects			826,600	1,583,800	1,584,500	1,583,000	1,578,400	1,586,000	1,493,300	9,409,000	9,362,000	0	0	47,000

Unfunded Projects:

Project Number	Project Title	Total
SD 0046*	Regional Detention in Forbes & Juventa Creek Basins	2,173,100
SD 0048*	Cochran Springs/1A Washington Blvd Crossing Enh.	1,052,600
SD 0055*	Forbes Creek/98th Ave NE Riparian Plantings	98,000
Total Unfunded Surface Water Management Utility Projects		3,293,700

Project Number	Project Title	Budget	Actual	Balance
SD 0051	Forbes Creek/KC Metro Access Road Culvert Enh.	279,200	72,694	206,506
SD 0053	Forbes Creek/Coors Pond Channel Grade Controls	260,200	74,418	185,782
SD 0054	Forbes Creek/BNSFRR Fish Passage Improvements	51,500	108	51,392
SD 0059	Tatum Lake Blvd Flood Control Measures	82,400	4,045	78,354
SD 0060	Juventa Creek/NE 121st St Bank Stabilization	103,300	51,699	51,601
SD 0057	Streambank Stabilization Program - NE 88th Street	50,000	21,228	28,772
Total Prior Year(s) Funding (Budget to Actuals):		826,600	224,189	602,411

Notes

- * = Modification in timing and/or cost (see Project Modification/Deletion Schedule for greater detail)
- = = Moved from unfunded status to funded status
- ° = Moved from funded status to unfunded status
- Shaded year(s) = Previous timing
- Bold Italic = New projects

**CITY OF KIRKLAND
CAPITAL IMPROVEMENT PROGRAM
2006 TO 2011**

PROJECT #	SD 0048 000
DEPARTMENT	Public Works
DEPARTMENT CONTACT	Ray Steiger

PROJECT TITLE	COCHRAN SPRINGS / LAKE WASHINGTON BLVD CROSSING ENHANCEMENT
CRITERIA	PROJECT IMPACTS (RESPOND TO ALL SECTIONS WHICH APPLY)
Amount of public disruption and inconvenience caused	<i>The preferred alternative for this project would require closure and detours on Lake Washington Boulevard which handles approximately 25,000 vehicles per day including transit, residential, commuting traffic, and business services. It is anticipated that the installation of the bottomless culvert would require closure of approximately two weeks and require a dedicated detour.</i>
Community economic impacts	<i>The closure during construction will have a temporary economic impact to drivers and possibly surrounding businesses. The long-term impact of continued sedimentation would contribute to seasonal flooding of the Boulevard which would have disruptive impacts to drivers.</i>
Health and safety, environmental, aesthetic, or social effects	<i>Localized flooding and environmental degradation will continue if the sedimentation along this stretch of Cochran Creek is not addressed. Available fish habitat would be enhanced with the projects.</i>
Responds to an urgent need or opportunity	<i>This project is identified as a high priority in the Surface Water Comprehensive Plan.</i>
Feasibility, including public support and project readiness	<i>The preferred alternative will require significant permitting, community information, and a significant detour/traffic control plan in order to be successful.</i>
Conforms to legal or contractual obligations	<i>Will be designed and constructed per professional and legal standards and guidelines.</i>
Responds to state and/or federal mandate	<i>Environmental and habitat enhancement for fish including native cutthroat and other species is consistent with the Endangered Species Act.</i>
Benefits to other capital projects	<i>None identified.</i>
Implications of deferring the project	<i>Continued sedimentation, loss of habitat, and potential flooding of Lake Washington Boulevard and surrounding commercial properties.</i>
CONFORMANCE WITH ADOPTED COMPREHENSIVE PLAN	Name of Neighborhood(s) in which located: <i>Lakeview</i> Is there a specific reference to this project or land use in the immediate vicinity? How does the project conform to such references? Attachments: <input type="checkbox"/> (Specify)
LEVEL OF SERVICE IMPACT	<input type="checkbox"/> Project provides no new capacity (repair, replacement or renovation). <input checked="" type="checkbox"/> Project provides new capacity. Amount of new capacity provided: approximately 30-40% <input type="checkbox"/> Project assists in meeting/maintaining adopted level of service. <input type="checkbox"/> Project required to meet concurrency standards.

PROJECT SUMMARY SHEET

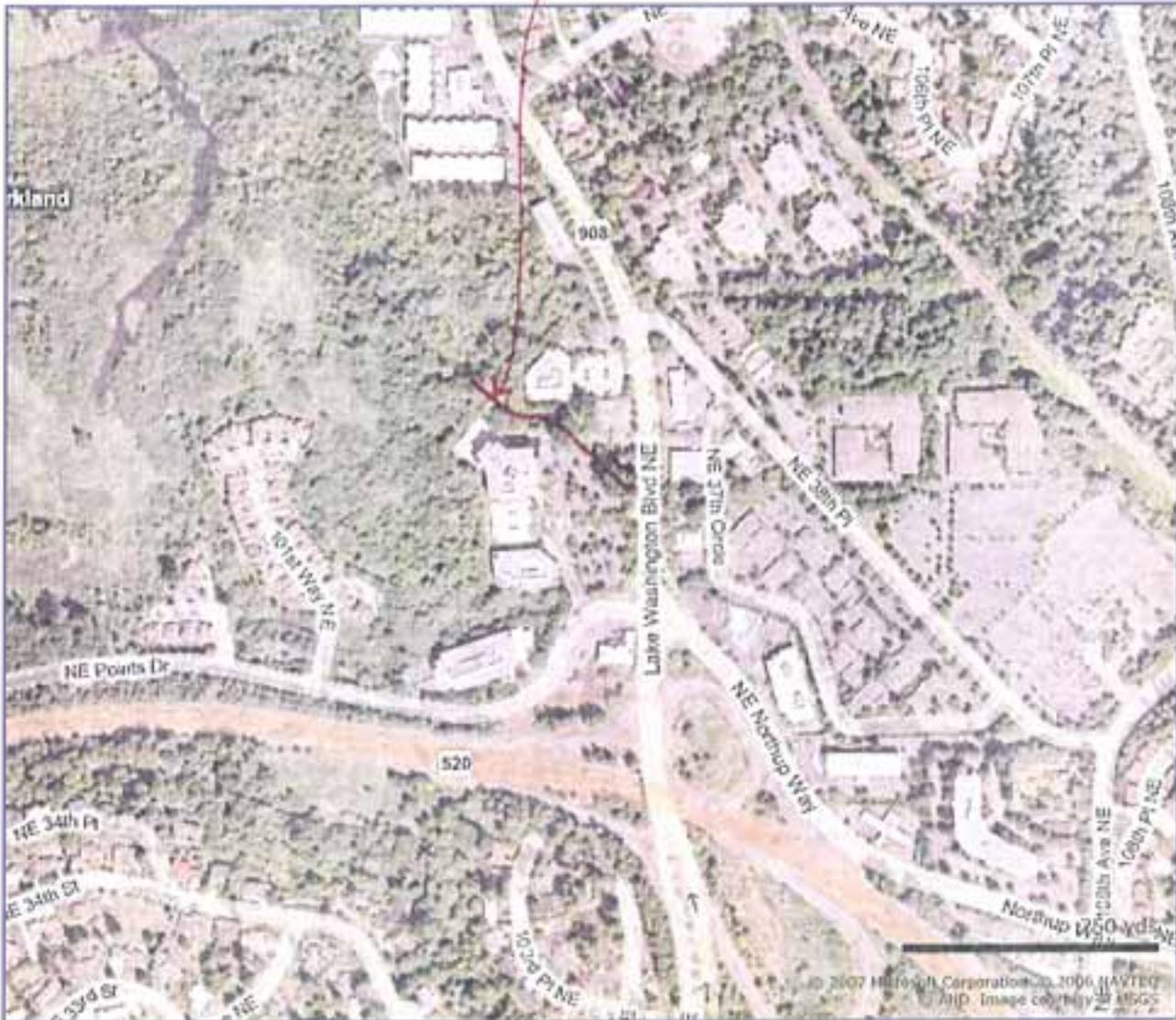
Cochran Springs Creek - Culvert Improvement at Lake Washington Boulevard and Sediment Control Downstream of Lake Washington Boulevard

- Problem Description:** The culvert and channel at Lake Washington Boulevard were evaluated for fish passage and flood conveyance (Penhelligon Associates 2000). Under existing conditions, a high spot in the channel downstream of the culvert results in backwater conditions and sedimentation at the culvert. This presents an ongoing maintenance task for City crews. The backwater condition may impede the culvert's capacity to convey large peak events. However, the backwater also creates conditions that allow fish passage at the culvert (as long as the culvert is maintained to remove sediment).
- Additionally, sediment deposition downstream of Lake Washington Boulevard may increase the risk of overbank flooding water in the Yarrow Bay business park.
- Project Description:** The preferred alternative identified by Penhelligon for improving this culvert would address both fish passage and flood conveyance, by (1) replacing the Lake Washington Boulevard culvert with a box culvert, (2) regrading the channel to remove the downstream control point, and (3) including habitat structures and streamside vegetation to improve habitat conditions. The budget estimate for this project is based on these actions.
- Sand in the stream appears to originate from springs and upwelling, as opposed to large-scale bank erosion. Culvert design should be analyzed to ensure that sediment accumulation will not continue to impede the culvert. In addition to culvert improvements, sediment passage at the culvert could be increased by flattening the channel grade upstream of the culvert and increasing the grade through the culvert.
- In addition to the work recommended by Penhelligon, a berm should be considered on the left bank of the stream along to prevent flooding of the business park. The berm should be set back from the stream bank as far as possible. Although there is existing vegetation in the riparian zone, additional enhancement planting should be included.
- Design Assumptions:** Planting along approximately 525 feet of channel, 55 feet each side; with existing vegetation. Assume planting is necessary in approximately 50 percent of this area. A temporary or permanent easement would be needed from private property owners on each side of the stream. No costs for easements are included. Construction of a berm may require an individual Corps permit.
- Project Benefits:** Improving fish passage at the culvert will allow access to approximately 375 feet of breeding and rearing habitat. Increasing the culvert's flow capacity will reduce the risk of flooding on Lake Washington Boulevard.



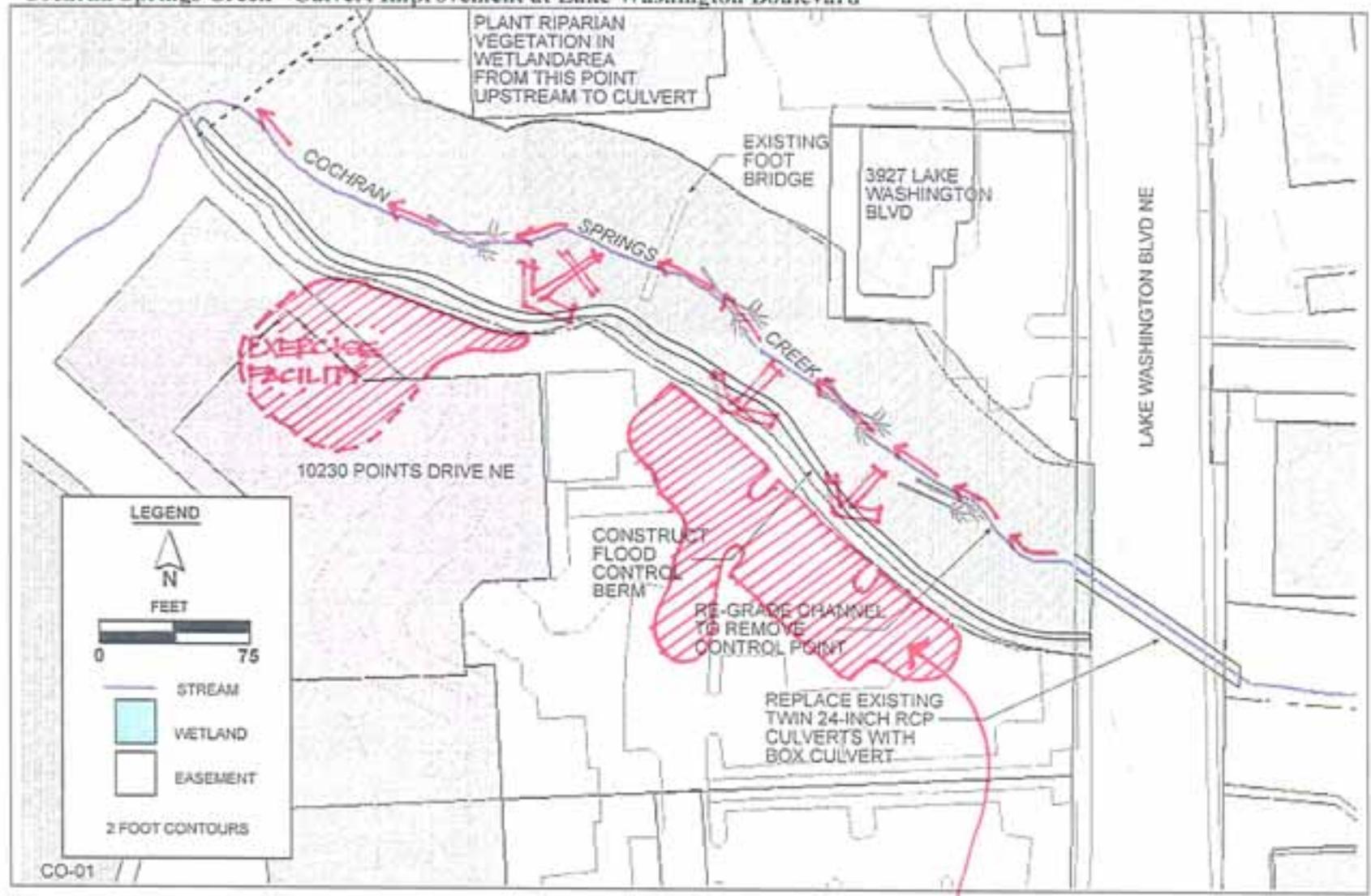
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COCHRAN SPRINGS CREEK

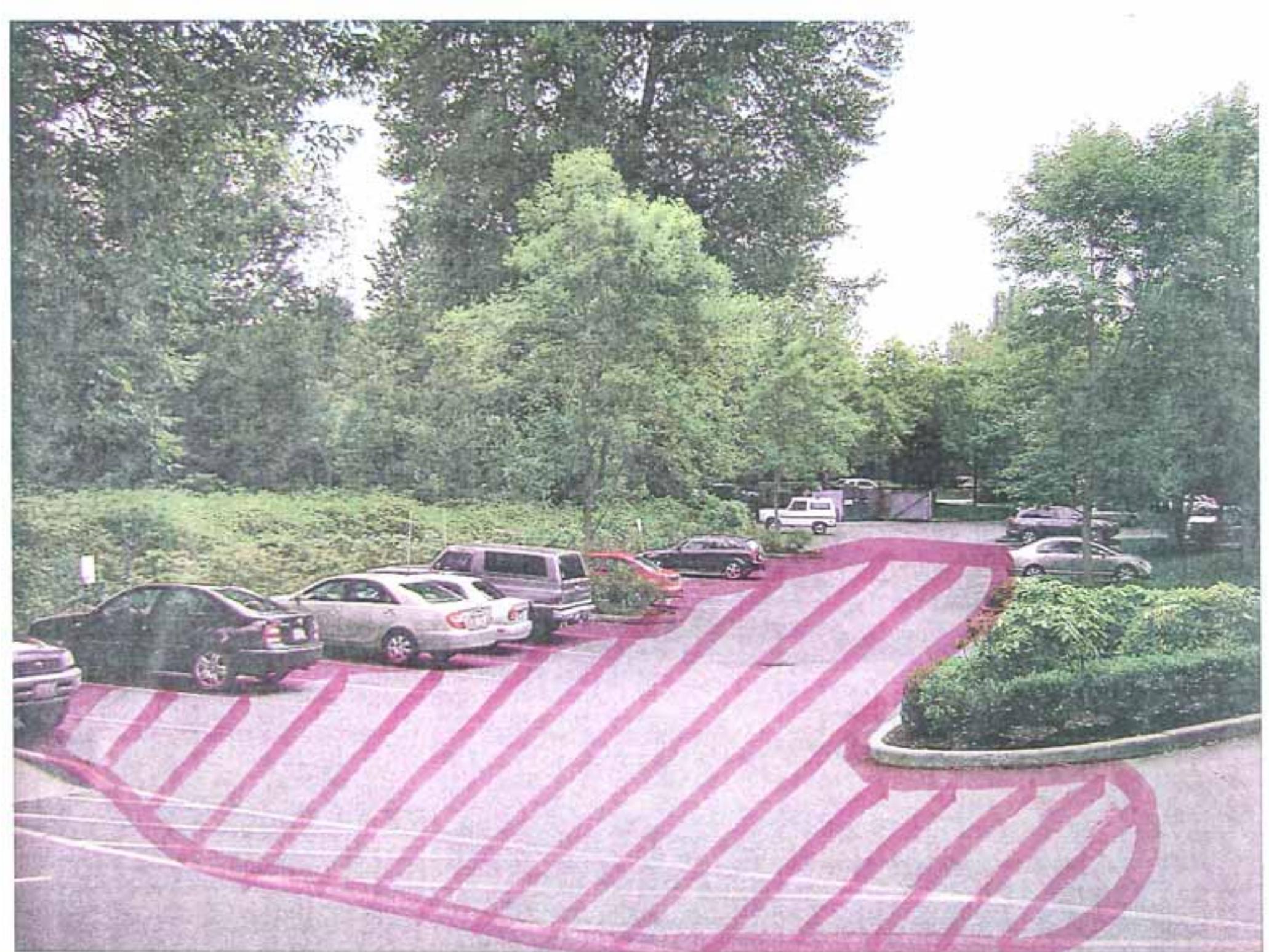


PROJECT SKETCH

Cochran Springs Creek - Culvert Improvement at Lake Washington Boulevard



AREAS OF FLOODING







DRAFT

October 17, 2007

Keith Maehlum, Vice President
The Plaza at Yarrow Bay Inc.
2025 First Avenue, Suite 700
Seattle, WA 98121

RE: Flood Control Project in 2008-2013 CIP

Dear Mr. Maehlum:

Thank you for your letter and September 4th testimony concerning the 2008-2013 CIP and flooding at the Plaza at Yarrow Bay office park. In response to your concerns, and after review by surface water staff, the 2008-2013 CIP has been altered as follows:

- A new project, SD-0065 Cochran Springs Creek/Plaza at Yarrow Bay Flood Control has been added. This project is funded at \$156,000, and is scheduled to begin in 2008.
- The estimated cost for SD-0048, which is currently unfunded, has been reduced by \$156,000 to reflect the work that will be done under SD-0065.

Should you have any questions or concerns about the 2008-2013 CIP, please contact Jenny Gaus, Surface Water Engineering Supervisor, at (425) 587-3850. The project will be assigned to a project engineer in January of 2008, and that person will be in contact with you concerning specifics such as design and schedule. Thank you for your interest in surface water issues.

Sincerely,
City of Kirkland

James Lauinger, Mayor

Cc: Dave Snider, Capital Projects Supervisor
Jenny Gaus, Surface Water Engineering Supervisor